

Communicating government statistics for a public audience

What we advise government analysts to do
Lessons from supporting the COVID-19 press briefings

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Six Principles

1. Set out the message before you start
2. Understand and support your audience
3. Simple is (usually) better than complex
4. Familiarity is helpful
5. Accessibility really matters
6. Step back and review



1. Setting out the message

- Work out what your message is and the best way to convey it to your audience
- There is a trade off between complexity and ease of understanding. Is it worth the effort for your audience?

2. Understand and support the audience

- Tailor your content to meet their needs
- If you can, talk to them!
- What is the best way to support their understanding?
- Do you already know what works for this group?
- If the audience have different preferences, use a mixture of content that addresses those

Know the audience: ONS website user personas

“People make important decisions based on my work. I need to use data I can trust to build a profile of my region.”

Policy Influencer

“Written reports give helpful context, but I’d prefer to see the data. It has to be very easy to find what I want.”

Expert analyst

“I want to enhance my understanding of the UK economy and structure using data. Summary reports are too vague.”

Information forager

“I want to find unbiased information so that I can verify the key points of what I see on the news and Facebook.”

Inquiring citizen

“I need easy access to specific types of data that I can reformat, cross-reference and manipulate.”

Technical user

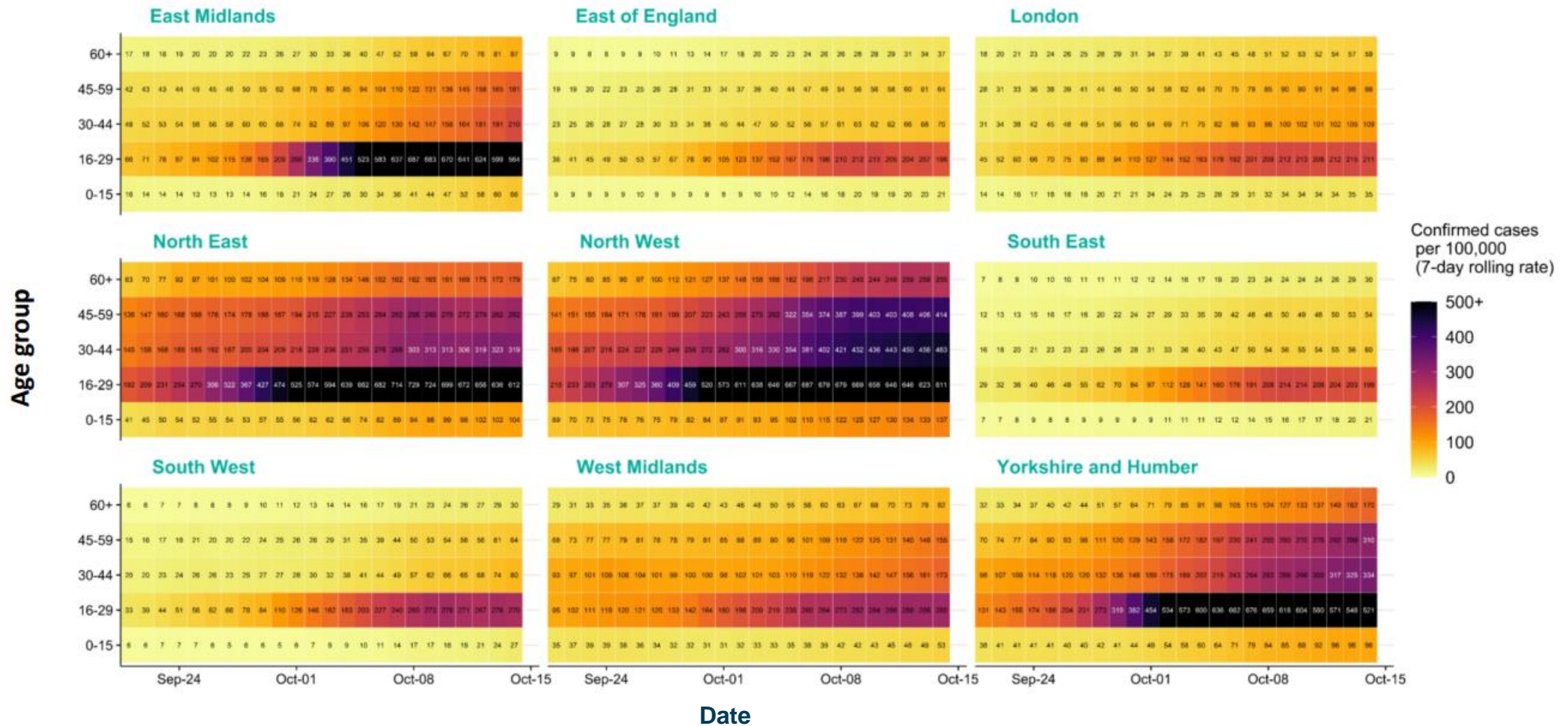


3. Simple is (usually) better than complex

Some top tips

- Charts should work on their own
- Make the title clear and use a descriptive title if you can
- Help the audience focus on the main message
- Stick to one main message per visual – if you have several messages, split them out
- Test it for real, if you can

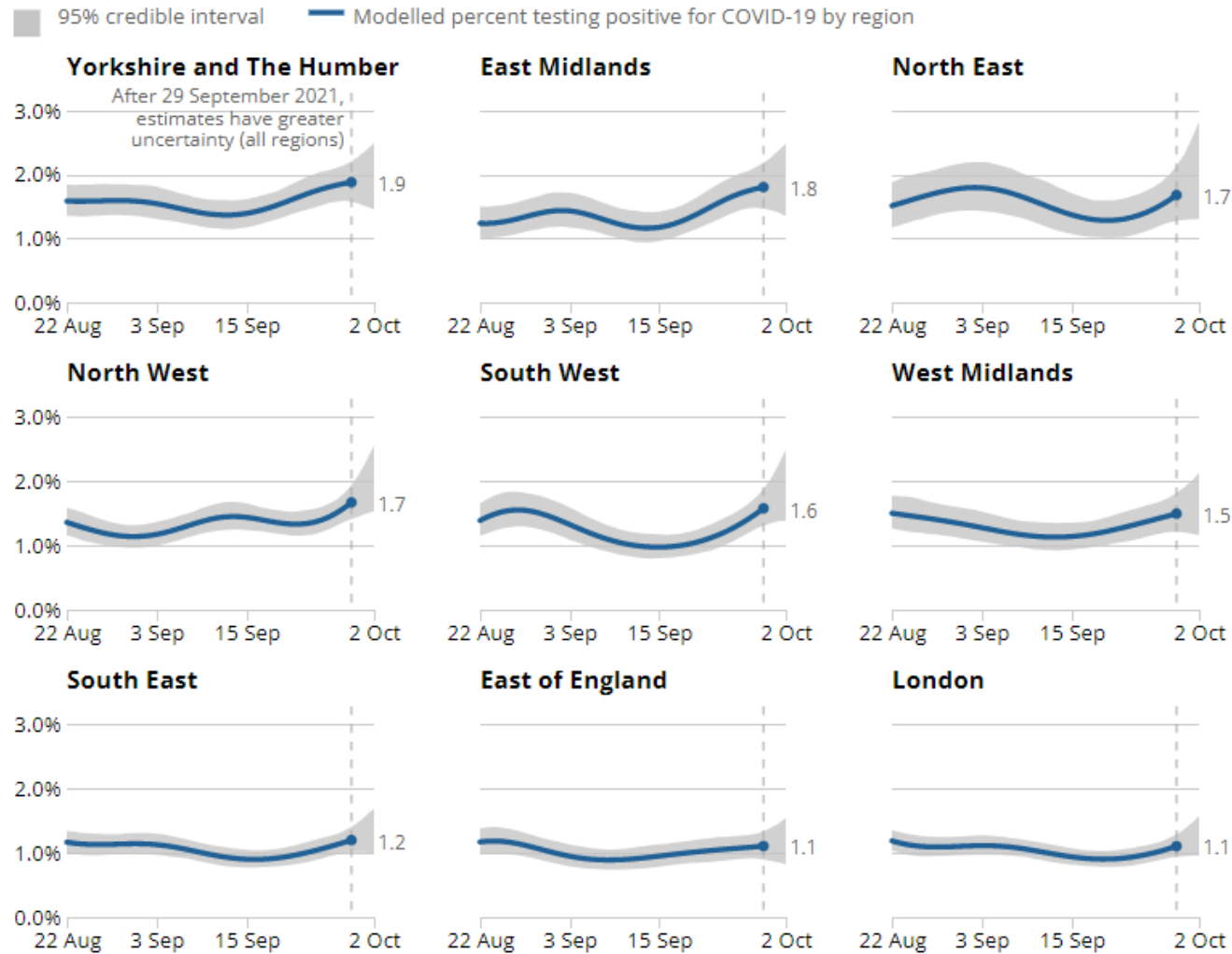
COVID-19 positive case heat maps for England by age group and region



Source: Case data from SGSS. Produced by Outbreak Surveillance Team, PHE.
 Contains National Statistics data © Crown copyright and database right 2020.

The percentage of people testing positive for COVID-19 increased across most regions in the week ending 2nd October 2021

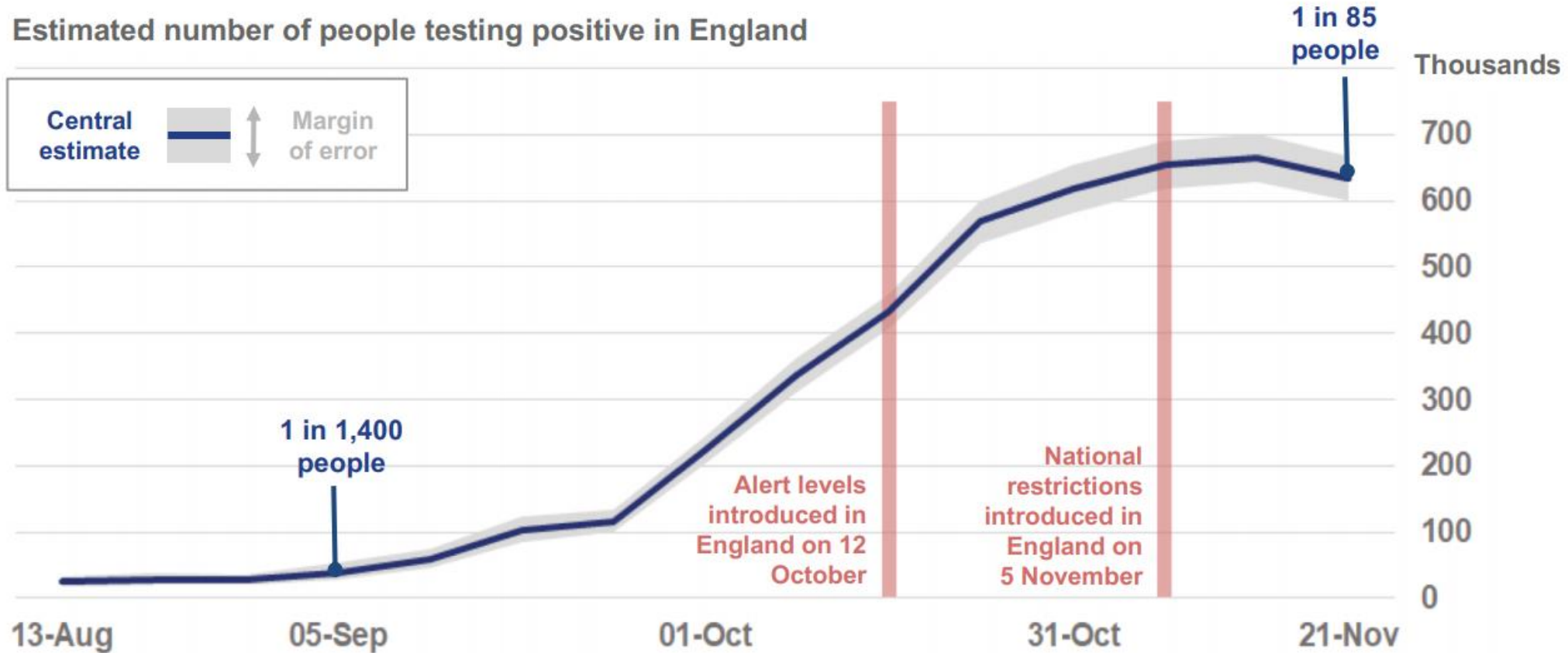
Estimated daily percentage of the population testing positive for coronavirus (COVID-19) on nose and throat swabs by region, England, 22 August to 2 October 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Infection Survey

The number of people testing positive for COVID-19 increased after the summer. There are signs it is now levelling off.

Estimated number of people testing positive in England



Source: Office for National Statistics – Coronavirus (COVID-19) Infection Survey.

These estimates refer to infections reported in the community in private households. They exclude infections reported in hospitals, care homes or other institutional settings.

Further details on data sources can be found here: <https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences>

Life expectancy calculator

Use our interactive calculator to find out your life expectancy and your chance of living to 100 years old.

People are living longer. Improved working conditions, reduced smoking rates and improved healthcare have all contributed to increasing life expectancy from generation to generation.

Enter your age and sex in our calculator to find out your life expectancy, and the likelihood of you living to be 100 years old.

Age

- 54 +

Sex

Male Female

Calculate your life expectancy

Your average life expectancy is **84 years**

However there's a chance you might live longer...

● **92 years**

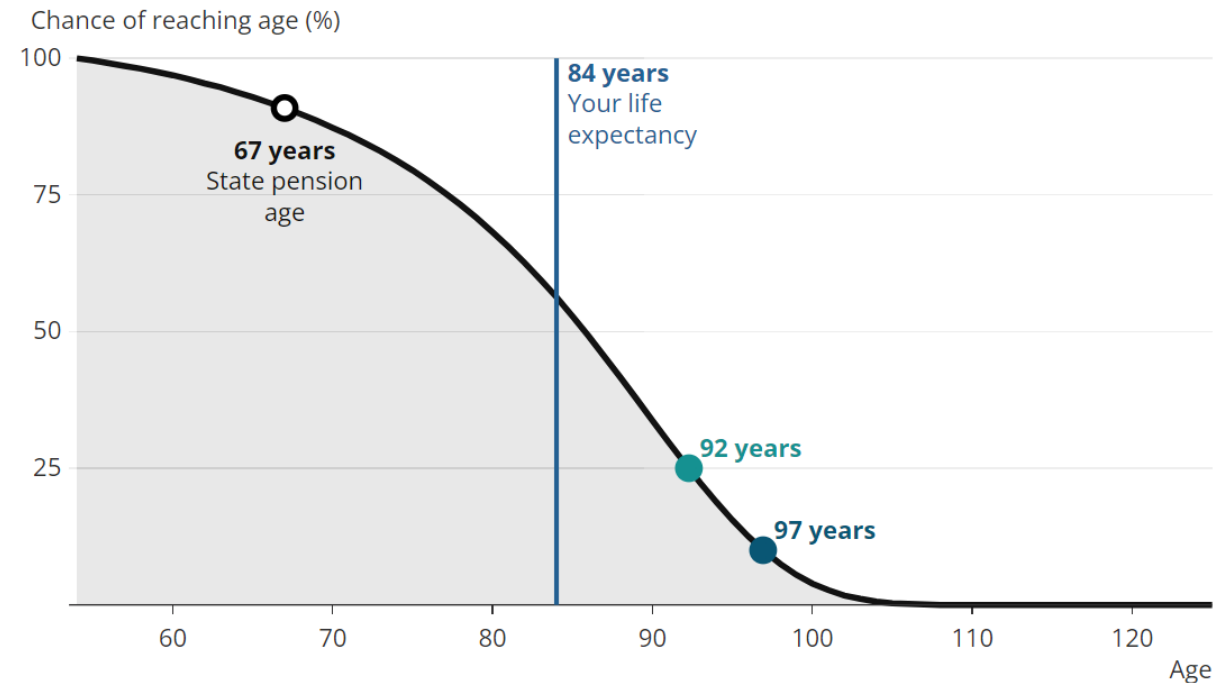
1 in 4 chance

● **97 years**

1 in 10 chance

● **100 years**

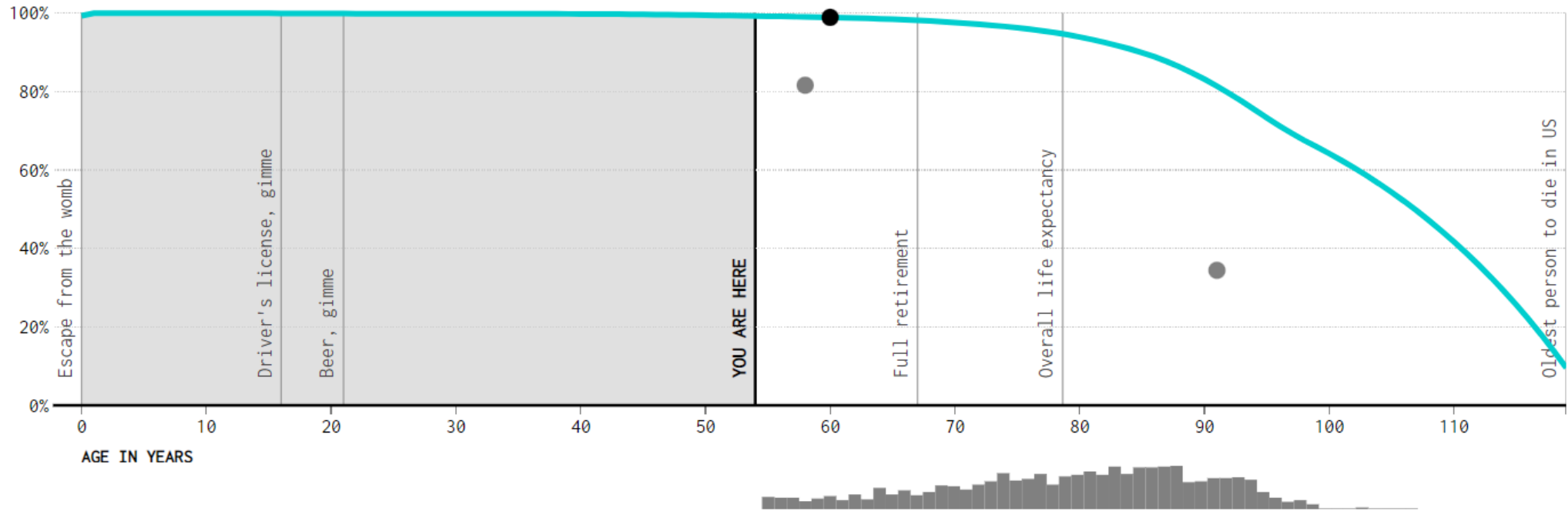
3.9% chance



I am **male** and currently **54** years old.

SLOW
FAST

PROBABILITY OF LIVING TO NEXT YEAR



Probabilities For Years Left to Live

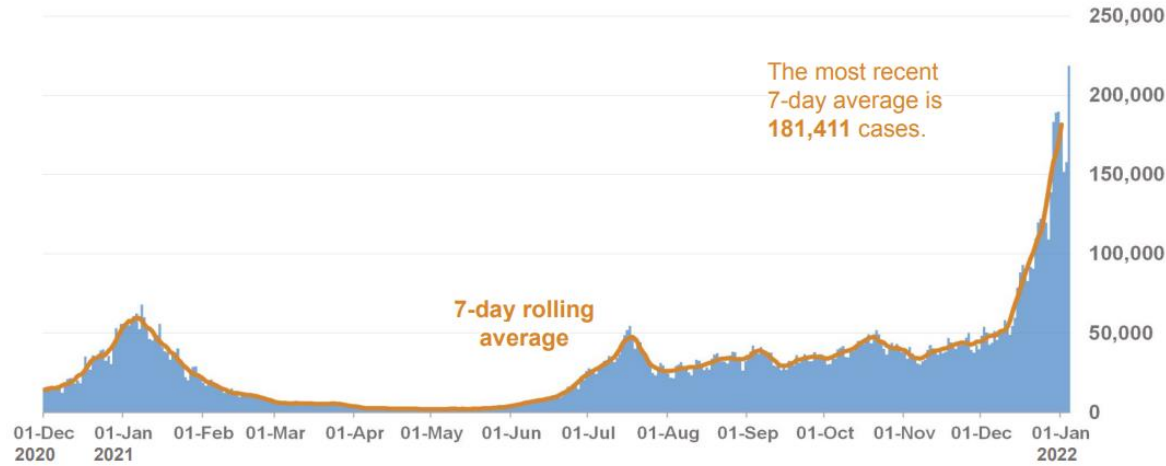
Years Left to Live	Probability (%)	Count
0 to 9	8%	(111)
10 to 19	17%	(228)
20 to 29	30%	(393)
30 to 39	34%	(445)
40 to 49	11%	(139)
50 or more	0%	(6)

<http://flowingdata.com/2015/09/23/years-you-have-left-to-live-probably/>
<https://flowingdata.com/2020/08/04/finding-the-new-age-for-your-age/>

4. Familiarity is helpful

The number of people testing positive for COVID-19 in the UK

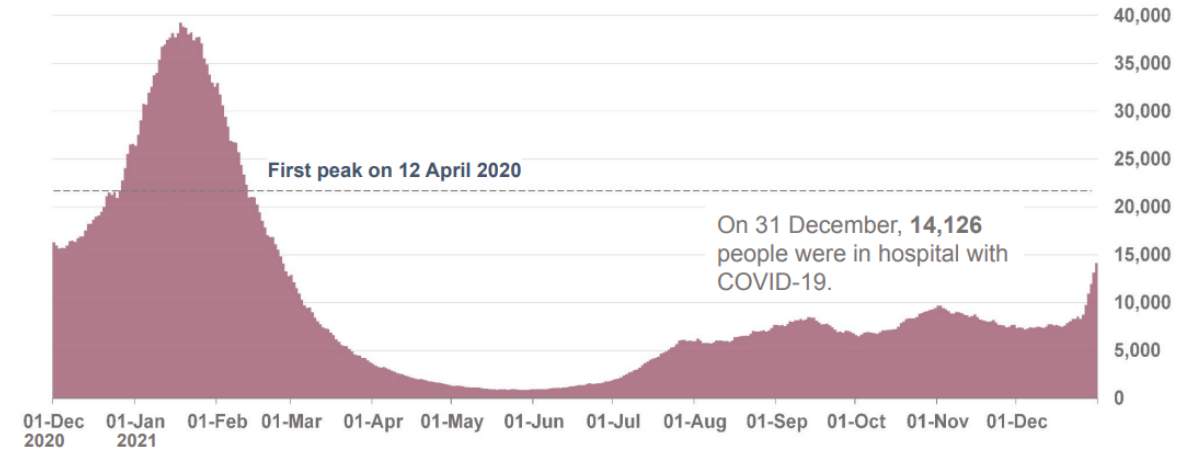
Number of cases each day, by date reported, up to 4 January



Source: <https://coronavirus.data.gov.uk/>
 Further details on data sources can be found here:
<https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences>

The number of people in hospital with COVID-19 in the UK

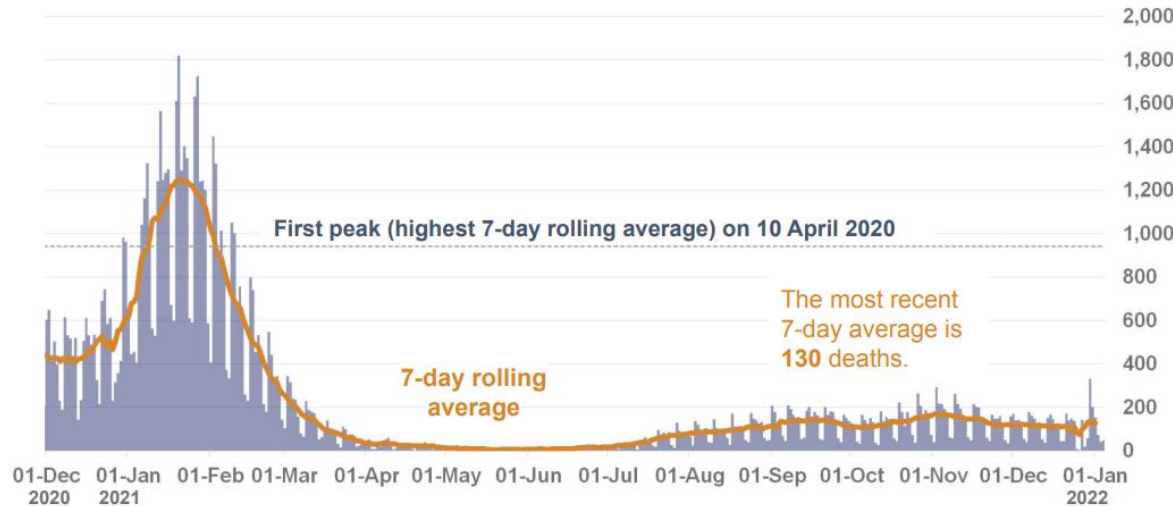
Number of people in hospital each day, up to 31 December



Source: <https://coronavirus.data.gov.uk/>
 Further details on data sources can be found here:
<https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences>

The number of deaths of people who had a positive test result for COVID-19 in the UK

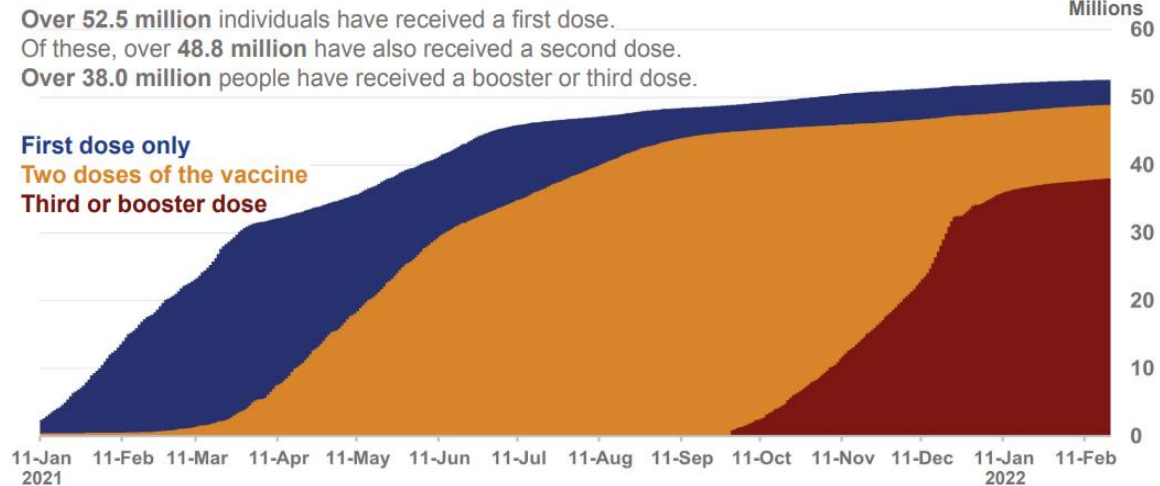
Number of deaths each day, by date reported, up to 4 January



Source: <https://coronavirus.data.gov.uk/>
 Further details on data sources can be found here:
<https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences>

The number of people aged 12 and over who have received a vaccination for COVID-19 in the UK

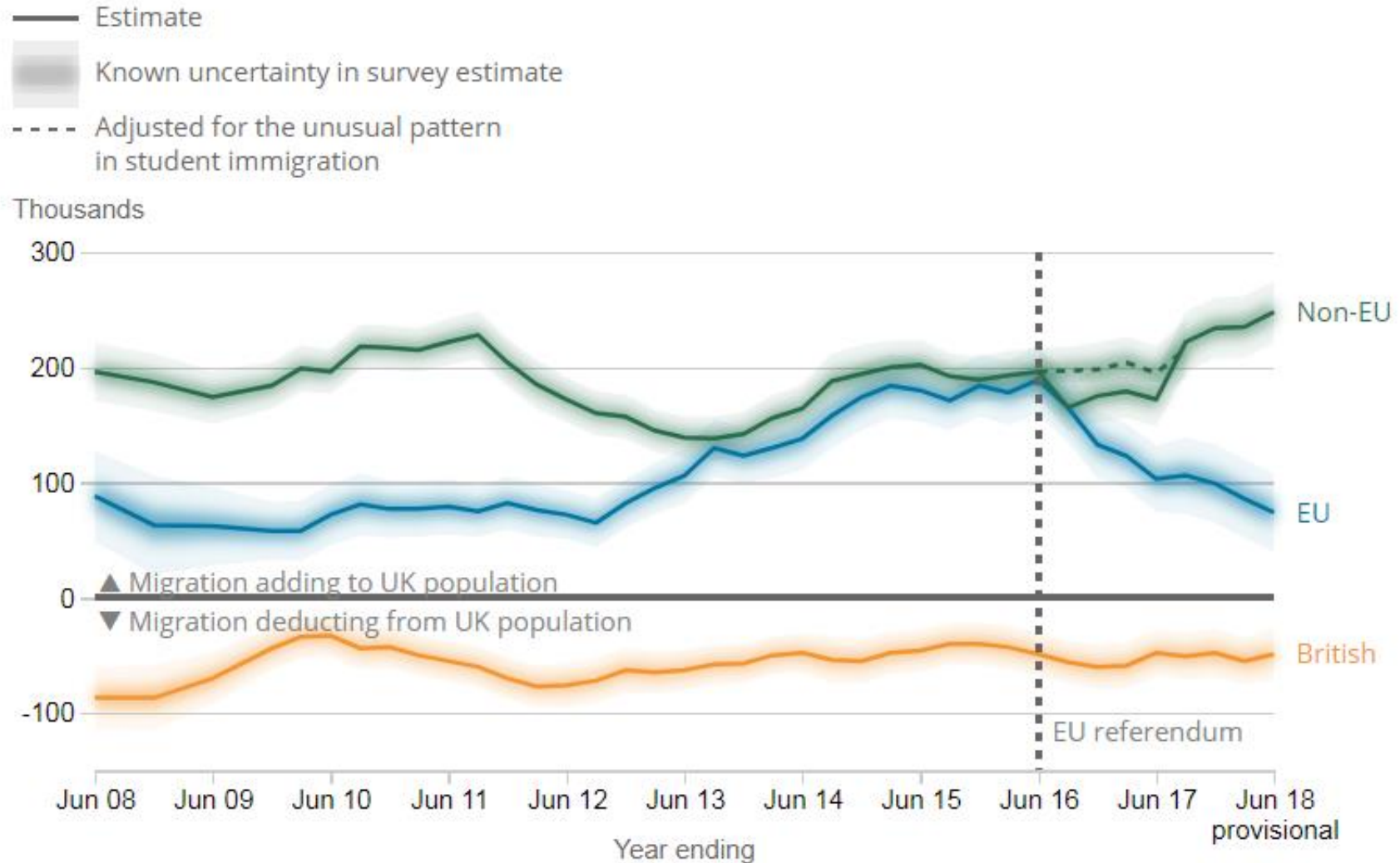
Cumulative number of people who have received a COVID-19 vaccination, by date reported, up to 20 February



Source: <https://coronavirus.data.gov.uk/>
 Further details on data sources can be found here:
<https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences>

Caveats and uncertainty are challenges

Figure 2: Net migration by citizenship, UK, year ending June 2008 to year ending June 2018

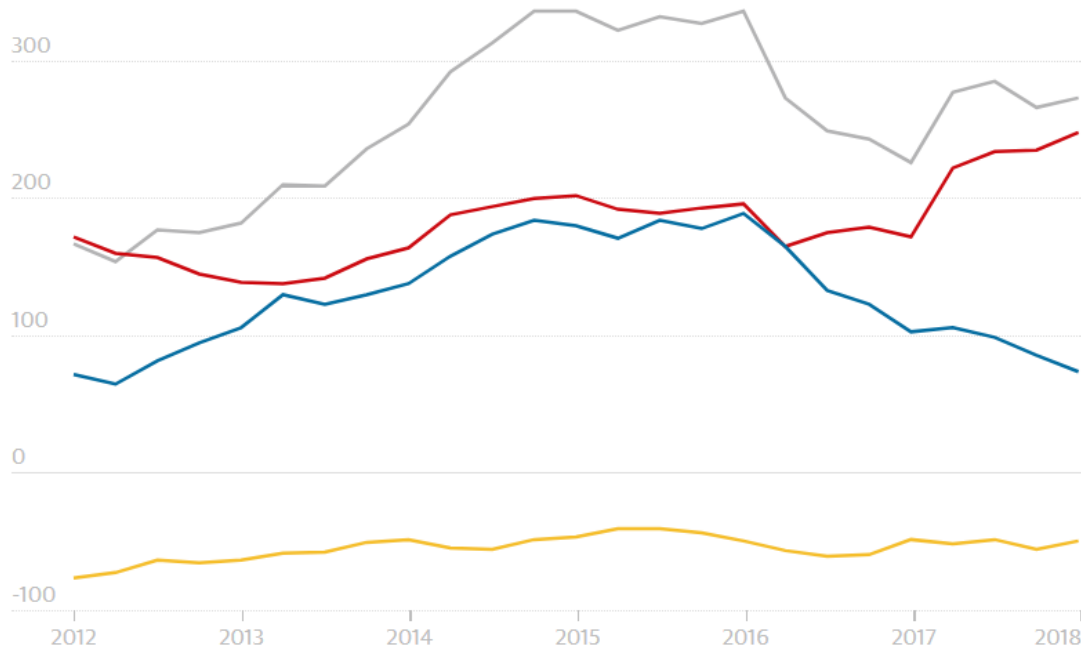


Source: Long-Term International Migration, Office for National Statistics

Net migration from non-EU countries rose to 248,000 in the year to June, while EU net migration fell further to 74,000

Net long-term migration, thousands

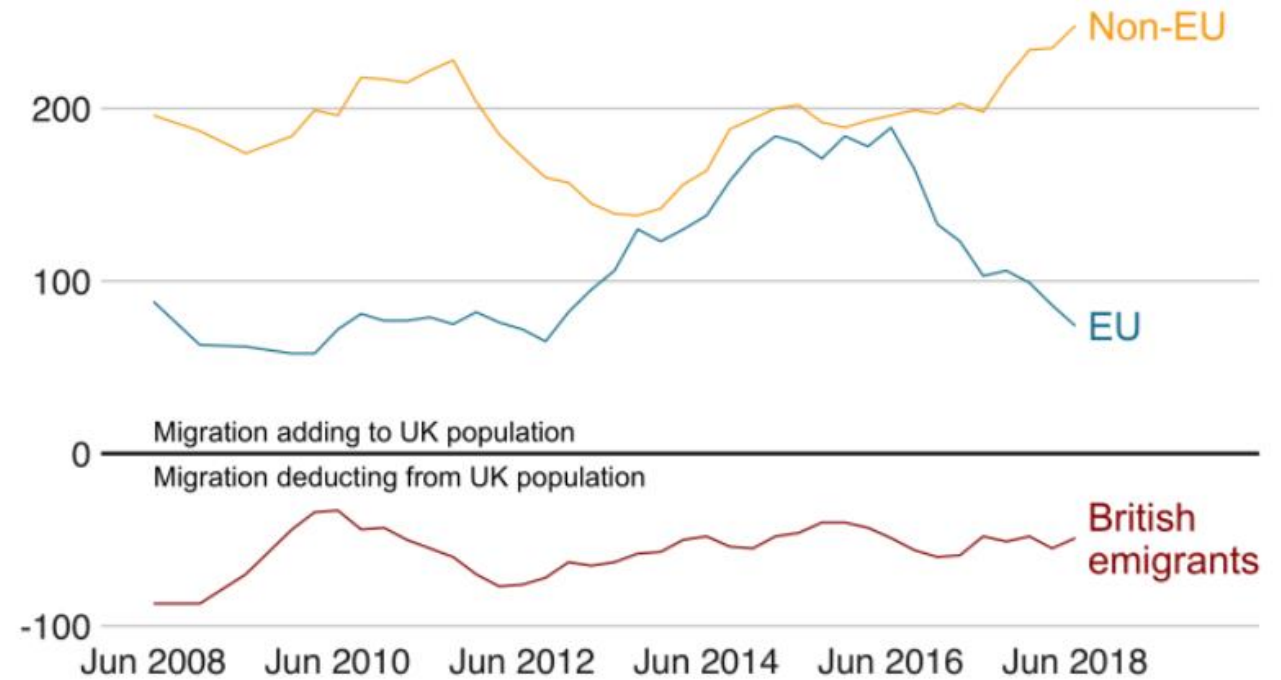
Overall net migration Non-EU EU British



Guardian graphic | Source: ONS

EU migration is at its lowest rate since 2012

Net migration into the UK up to June 2018, thousands



Source: ONS. Non-EU figures adjusted for unusual student migration pattern



5. Accessibility matters

Content should be accessible

- In practice, this means thinking about how to make sure charts, tables and text meet the needs of all users
- Your choice of colours, fonts and backgrounds have a real impact on how easy it is to read charts
- Make sure that you are aware how to mitigate accessibility issues and think about when and how you need to change your work to do so

6. Take a breath ... step back and review

Step back and review

- Think about the overall impact of your content
- Do you really need to cover everything?
- How long will it take to present the material?
 - Complex things take longer to explain – is it worth the investment for your audience?
 - Most audiences start to flag after about 20 minutes
- Use peer review. If you can, ask people like the audience

Resources

Where to find more information

- [Style.ONS](#) guidance on writing about and presenting statistics
- Analysis Function guidance on [accessible publications](#)
- Analysis Function guidance on [charts](#), [tables](#) and the [use of colour](#)
- Analysis Function guidance on [infographics](#)
- Analysis Function tips on [dashboard design](#)
- Analysis Function guidance on [communicating uncertainty](#)
- [Uncertainty toolkit](#) for analysts in government